REMARKS/ARGUMENTS

1. Comments regarding Amendments

Claim 1 was amended to specify that the injector is porous, open-ended graded and of a simple tubular geometry. In addition, the amendments clarify that the electromagnetic field is applied from outside of the container. Support for these amendments is found for example in original claims 9, 10, 11, Figure 1, page 4, lines 14-29, page 5, lines 1-9, and page 3, lines 6-16. Claims 9 and 10 were amended in view of the amendment to claim 1 to delete language that was duplicative of language in amended claim 1. Claims 12-14 were amended to correct dependency in view of the other amendments. Claims 16-20 were canceled as being directed to a non-elected invention. Applicants reserve the right to pursue these claims in a divisional application.

2. Response to Rejection under 35 U.S.C. § 112, second paragraph

Claims 1-12, 14, and 15 were rejected as indefinite. Specifically, the use of the phrase "oxygen rich" was stated to cause indefiniteness. In fact, the phrase "oxygen rich atmosphere" is defined in the specification at page 6, line 7. Therefore, "oxygen rich atmosphere" is not indefinite and applicants request that the rejection be withdrawn.

3. Response to rejection under 35 U.S.C. § 103(a) over Namiki in view of Thomas

Claims 1, 2, and 6-9 were rejected as being obvious over Namiki in view of Thomas. As amended the present claims relate to a method of forming a protective barrier on the internal surface of a container by plasma polymerizing organosilicon compounds on the internal surface. The method includes the insertion into the container of an open ended, porous, graded injector where the porosity increases toward the base of the container.

Namiki discloses forming protective barriers for containers but does not teach that the plasma polymerized layers are deposited on the internal surface of the container. Thomas does deposit such layers onto the interior surface but does so through an open ended coaxial injector device that has no porosity. Neither Namiki nor Thomas suggest use of a porous graded injector for coating the interior of a container. Thus, claims 1, 2, and 6-9 as amended are not obvious over Namiki in view of Thomas.

4. Response to rejection under 35 U.S.C. § 103(a) over Namiki in view of Thomas and in further view of Nemani and Goto.

Claims 3-5 were rejected as being obvious over Namiki in view of Thomas and in further view of Nemani and Goto. As amended the claims relate to a method of forming a protective barrier on the internal surface of a container by plasma polymerizing organosilicon compounds on the internal surface and a device for performing the method. The device and method include an open ended, porous, graded injector where the porosity increases toward the base of the container. The deficiencies of Namiki and Thomas are discussed above. Neither Nemani nor Goto overcome these deficiencies. Nemani teaches formation of an organolsilicate elayer in connection with integrated circuit fabrication. Nemani has no teaching or suggestion of forming such a layer inside a container and has no teaching or suggestion regarding the nature of an injector that could be used in forming such a layer inside a container. Similarly, Goto relates to deposition

of silicon dioxide onto a substrate using plasma enhanced chemical vapor deposition. Like Nemani, Goto has no teaching or suggestion of forming such a layer inside a container and has no teaching or suggestion regarding the nature of an injector that could be used in forming such a layer inside a container. Thus, claims 3-5 (in view of the amendment to the independent claim 1) are not obvious over Namiki in view of Thomas and in further view of Nemani and Goto.

5. Response to rejection under 35 U.S.C. § 103(a) over Namiki in view of Thomas and in further view of Fayet

Claims 10-12, 14 and 15 were rejected as obvious over Namiki in view of Thomas and in further view of Fayet. Since the limitations from claims 10 and 11 that the injector is porous and graded have been incorporated into claim 1, this rejection is considered in this response as applied to amended claim 1 as well. As previously noted Thomas and Namiki fail to disclose a porous injector to apply organosilicate materials on the interior of a container. The office action asserts that Fayet overcomes these deficiencies. However, Fayet's approach is substantially more complex than the present invention. Specifically, Fayet requires two elements that are clearly not part of the presently claimed invention. First, Fayet requires that an electrode be inserted into the container. Thus, moving electrical components is a key part of Fayet's invention. The present invention is much simpler because the electromagnetic field is applied entirely from outside the container as is clearly recited in amended claim 1. The presently claimed approach also allows more flexibility with regard to container shapes and tuning of the electromagnetic field. Second, Fayet requires that plasma not fill the entire insde volume of the container but rather be limited to a small regeion defined by an inner member that is conformed to the interior shape of the container. Thus, the inner member must be devised and designed to match each container geometry. In contrast, the present invention utilizes a simple tubular injector and controls the thickness of application of the layers merely by adjusting the porosity to increase toward the terminal or far end of the injector. Fayet's teaching that his complex "inner member" have larger pores at portions where the container was wider, does not teach or suggest a simple tubular injector that has increasing porosity toward the terminal end of the injector. Therefore, the present claims are patentable over Namiki in view of Thomas and Fayet.

In view of the above discussion, applicants request withdrawal of the rejection and allowance of all pending claims. Furthermore, since the genus claim 1 is patentable, species claim 13 should also be examined and allowed.

Respectfully submitted,

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